



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,778	05/23/2001	George A. Soli	41836/JWP/I267	2336

23363 7590 05/21/2003

CHRISTIE, PARKER & HALE, LLP  
350 WEST COLORADO BOULEVARD  
SUITE 500  
PASADENA, CA 91105

[REDACTED] EXAMINER

BUCZINSKI, STEPHEN C

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

3662

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	Examiner	Group Art Unit

*--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--*

#### Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

#### Status

- Responsive to communication(s) filed on \_\_\_\_\_.
- This action is **FINAL**.
- Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

#### Disposition of Claims

- Claim(s) 1-12 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- Claim(s) \_\_\_\_\_ is/are allowed.
- Claim(s) 1-12 is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
  - received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

#### Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s). 4  Interview Summary, PTO-413
- Notice of References Cited, PTO-892  Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948  Other \_\_\_\_\_

#### Office Action Summary

Art Unit 3662

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility or is not supported by either a specific and substantial asserted utility or a well established utility.

In this specific presentation of superluminal tunneling the specification and claims do not define apparatus that can adequately detect fempto second time comparisons and do not provide evidence that superluminal tunneling exists. Applicant speaks of ps resolution contrary to the publications that cite time resolution orders of magnitude smaller. No procedures have been shown to eliminate the tunneling effects themselves from the time measuring apparatus, if indeed this phenomena is what has been measured in the graphs presented. The apparatus suggested by Fig. 1 appears to be inadequate in every respect as there is no standard from which the measurements are based or compared. The source of the graphs in Figs. 2-4 is vague, as is the concept of time and energy being on the same axis.

3. Claims 1-12 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

In addition to the general lack of proof of the assertions behind what is being measured in "superluminal tunneling", another issue here is how the doppler shift in the direction from the center of the expanding universe can be compared given the continuous movement of the earth's rotation, revolution, as well as the motion of the solar system and the galaxy. Many variables exist in the ideas being presented that logically might apply if the fundamental concepts were proven. The effects of such tunneling on the instruments have also not been taken into account.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or

Art Unit 3662

described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

6. Claims 1-12 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Chiao.

The basic logical time comparison of a wave packet traveling between over two paths, one through a tunnel barrier medium has been described by Chiao in at least Fig. 2 of the reference. Any naturally occurring doppler shift must also effect the Chiao measurement inherently as claimed or at least would have been obvious as presented.

7. Prior art submitted 12 October 2001 has been made of record.

8. Drawings are objected under 37 CFR 1.83 in that all box representations must include descriptive labeling. The drawings are objected under 37 CFR 1.83 in that every feature claimed must be shown.

9. Any inquiry concerning this communication should be directed to Stephen C. Buczinski at telephone number (703) 305-1835. The examiner can normally be reached on Monday-Friday, 5:30 a.m.-2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarca, can be reached at 703 306-4171. Faxes should be sent to 703 872-9326 or 872-9327. General application status information can be obtained from the receptionist at 703 308-1113.



STEPHEN C. BUCZINSKI  
PRIMARY EXA